No. 626,563. Patented June 6, 1899.

R. RABY.

FOLDING LUNCH BOX.

(Application filed Apr. 4, 1899.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

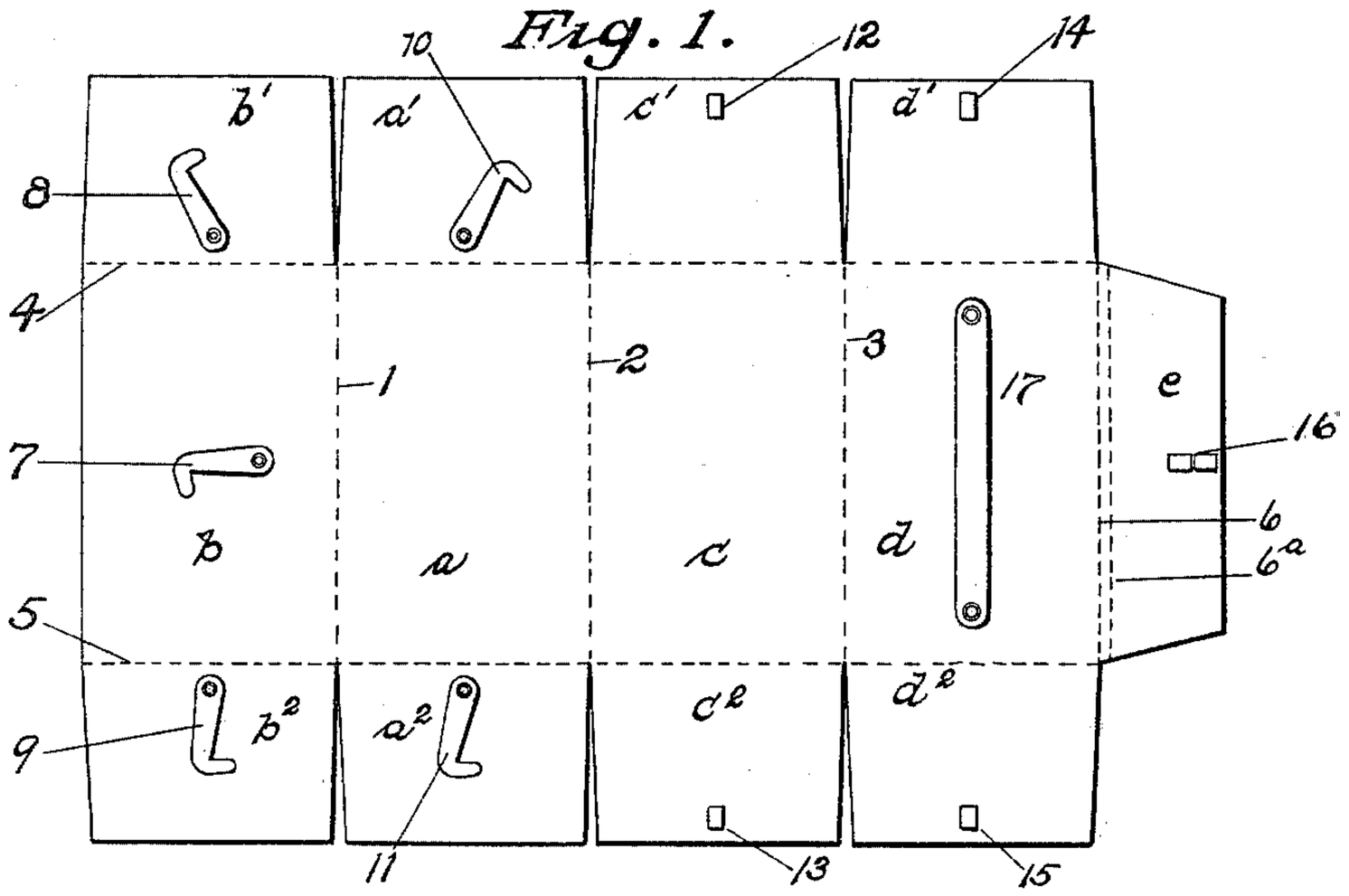
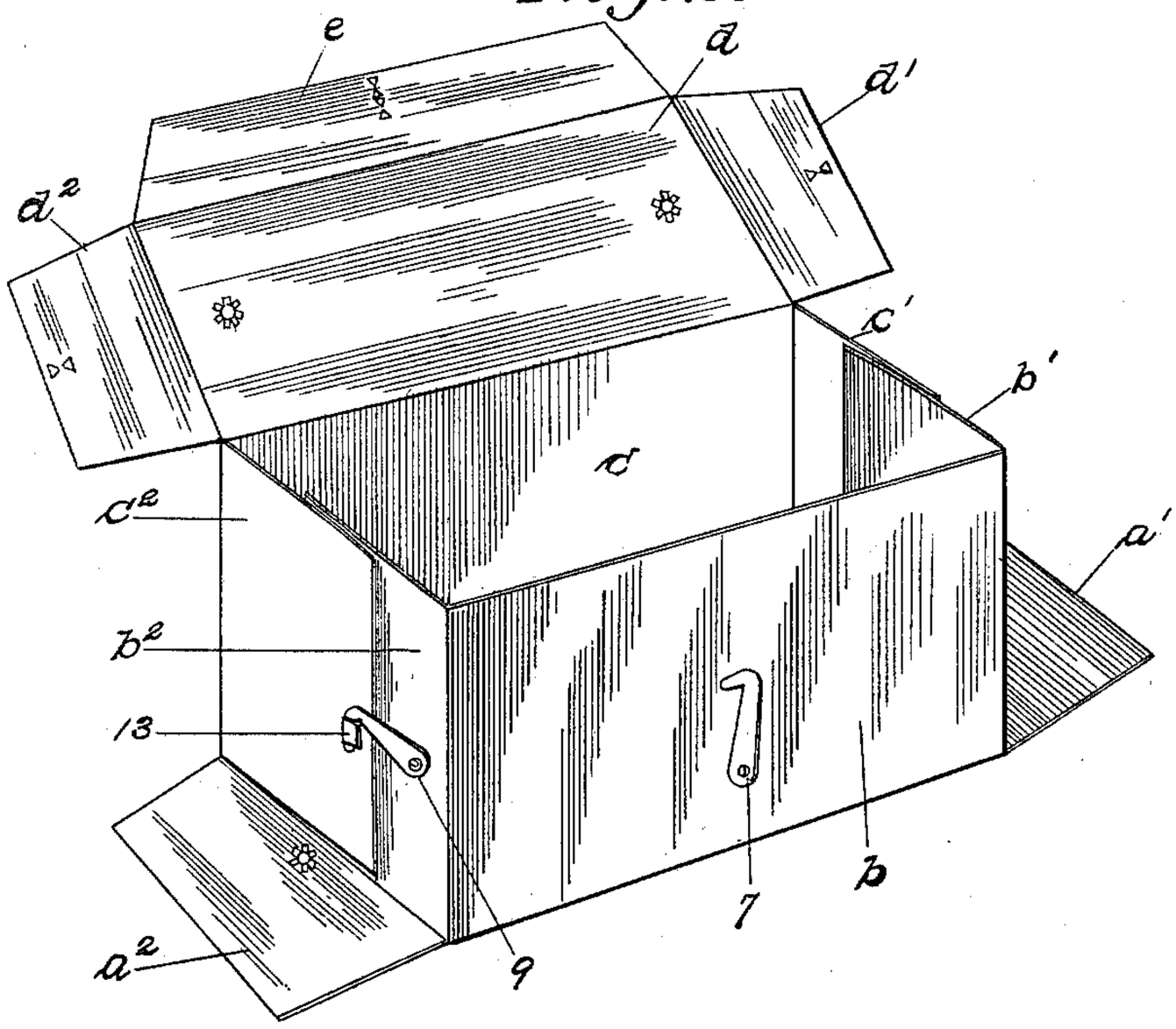


Fig. 2.



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No Model.) 2 Sheets—Sheet 2.

Fig. 3.

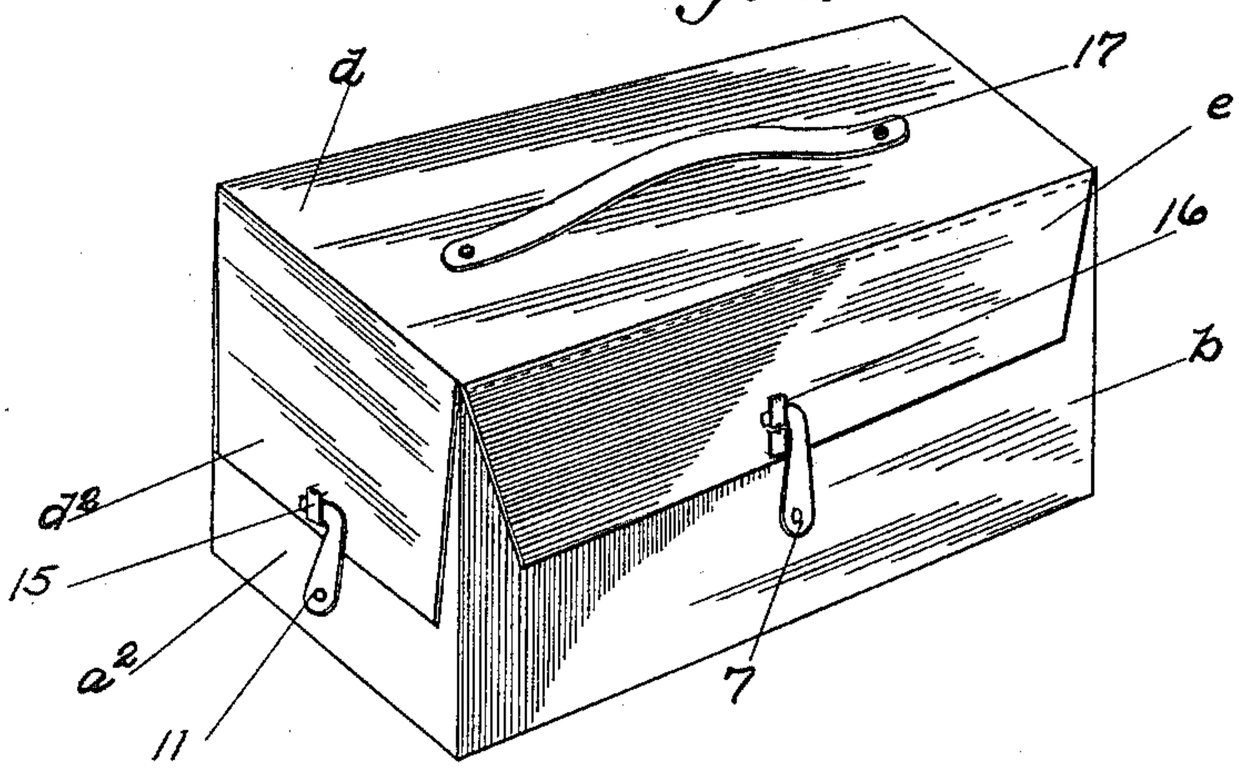


Fig. 4.

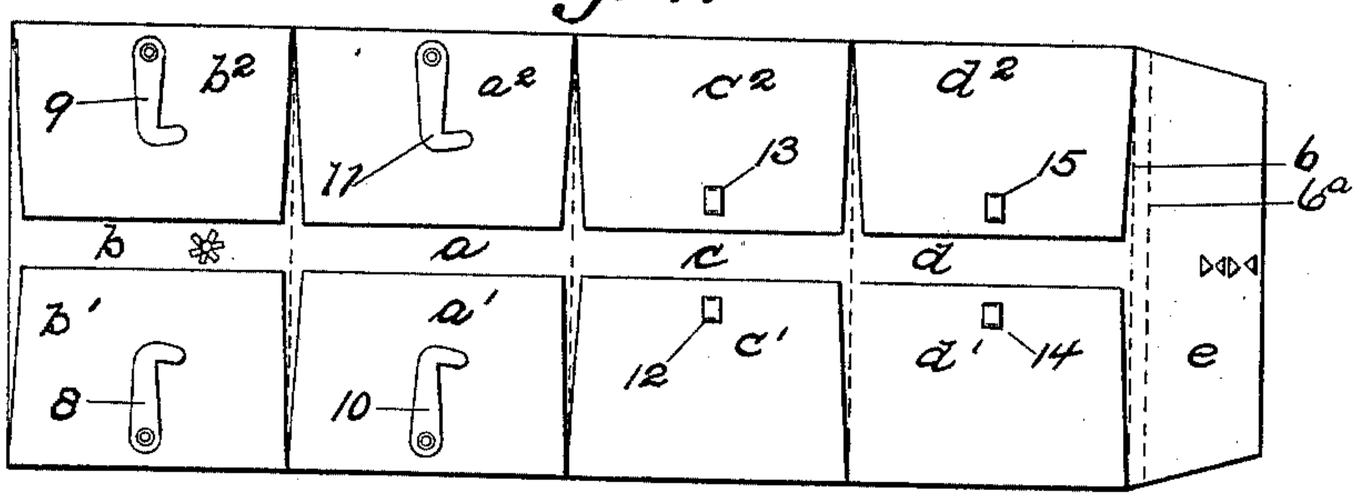


Fig. 7.

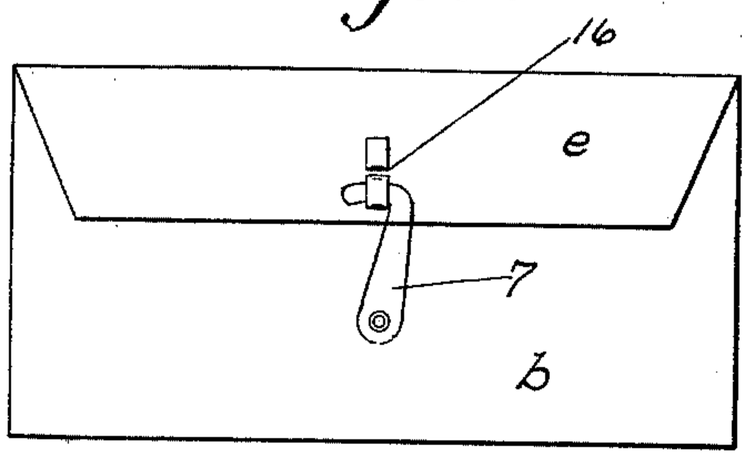


Fig. 5.

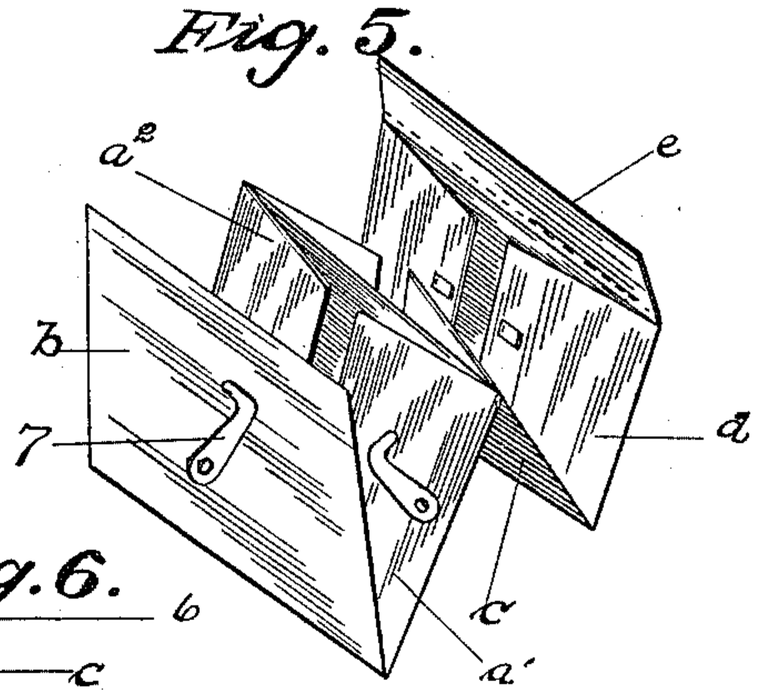
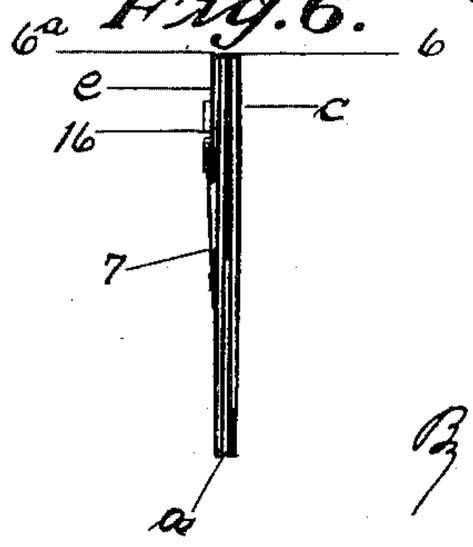


Fig. 6.



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UNITED STATES PATENT OFFICE.

RICHARD RABY, OF HARRISBURG, PENNSYLVANIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO HIMSELF, WILSON S. CORNMAN, THOMAS O. JOHNSTON, AND JAMES RUSS, OF SAME PLACE.

FOLDING LUNCH-BOX.

SPECIFICATION forming part of Letters Patent No. 626,563, dated June 6, 1899.

Application filed April 4, 1899. Serial No. 711,724. (No model.)

To all whom it may concern:

Be it known that I, RICHARD RABY, a citizen of the United States, residing at Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in Folding Lunch-Boxes, of which the following is a specification.

My invention relates to paper boxes, and more particularly to boxes for putting up lunches and other temporary uses.

The object of the invention is to produce from a simple integral blank a box which is strong and convenient when erected and which may be knocked down and securely packed in quantities in a minimum space.

The invention is illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan view of the blank, showing the surface which forms the outside of the box and the various fastenings for the box. Fig. 2 shows the box partly erected. Fig. 3 shows the box erected and closed. Fig. 4 is a plan view of the blank partly folded for shipment or storage. Fig. 5 shows another step in the method of folding. Fig. 6 is an end view of the blank completely folded, and Fig. 7 is a front view of the same.

The blank for my improved box is formed in one piece, as shown in Fig. 1. It consists of a bottom panel *a*, a front panel *b*, a back panel *c*, and a top panel *d*. To these panels are connected, respectively, end flaps a' b', &c., and a^2 b^2, &c. The remaining portion of the blank consists of a flap *e*, connected to the cover-panel and adapted to fold over the front of the box.

The dotted lines 1 2 3 between the panels indicate lines of scoring or creasing to facilitate folding the box. The lines 4 and 5 between the ends of the panels and the end flaps are also scored or creased. The end flaps are separated from each other by slits. Between the front flap *e* and the top panel *d* is a line of scoring 6, and a short distance from this line is a parallel scored line 6^a, the flap being folded on the line 6 when the box is erected and folded on the line 6^a when the box is packed for shipment, as will be hereinafter explained.

The fastening of my improved box consists of five flat hooks of sheet metal pivotally connected to the blank as follows: a hook 7 on the front panel *b*, hooks 8 9 on the flaps b' b^2, respectively, and hooks 10 11 on the flaps a' a^2. These hooks are preferably formed of thin sheet metal, such as tin or sheet-steel. They may be attached to the blank by means of suitable rivets. The hooks coöperate with five flat loops or keepers, which are also formed of sheet metal, having prongs adapted to be passed through the blank and clamped on the inside. There are keepers 12 13 on the flaps c' c^2 and keepers 14 15 on the flaps d' d^2. The keeper 16 has two openings, as shown in Figs. 3 and 6, the inner opening being used when the box is set up, as shown in Fig. 3, and the outer opening being used when the box is folded, as shown in Figs. 6 and 7.

The manner of erecting my improved box is as follows: The back and front are brought up to a position at right angles to the bottom panel. The end flaps b^2 c^2 are brought together and fastened by means of the hook and keeper 9 13. The corresponding end flaps b' c' are similarly fastened. The box is then in a condition shown in Fig. 2 and ready to be filled. When the box is filled, the lid is closed and the hook 7 on the front is brought into engagement with the upper loop of the keeper 16. The end flaps a' a^2, attached to the bottom panel, are then folded up and the end flaps d' d^2, attached to the cover, are folded down upon the flaps a' a^2. These flaps are then locked together by the hooks 10 and 11 and the keepers 14 and 15. The box is furnished with a suitable strap or handle 17.

In folding the box for shipment the end flaps are all turned in first, as shown in Fig. 4. The blank is then folded on the scored lines 1 2 3, as shown in Fig. 5. It is then pressed flat and the front flap brought over and locked by means of the hook 7 and the lower loop of the keeper 16, as shown in Figs. 6 and 7. It will be seen that my improved box is strong and simple in construction and that the parts are arranged so that any strain

tending to burst the box when filled is most effectually resisted. The end flaps are in two independent pairs at each end. The flaps of the back and front are connected together independently of the flaps attached to the top and bottom. The weight resting on the bottom of the box is transmitted through the flaps of the top and bottom to the handle without straining the flaps attached to the front and back panels—in other words, without straining the receptacle proper, which is formed by the front and back panels and their end flaps, as shown in Fig. 2. The fastenings are all flat. They do not project and are not likely to become accidentally loosened when the box is in use, and they occupy very little space when the box is folded. It will be noted that the front flap *e* folds over the free edges of the blank when folded for storage and protects them. The manner of folding also renders the box very convenient to carry in a pocket when knocked down, there being no exposed flaps or raw edges.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A box comprising bottom, top, back and front panels, the end flaps attached to the back and front panels folded over each other and connected by hooks and keepers, the end flaps of the top and bottom panels folded upon each other independently of the aforesaid flaps and connected by independent hooks and keepers, and the front flap connected with the top, said front flap being folded over the front panel and connected thereto by a hook and keeper, substantially as described.

2. A box comprising bottom, top, front and back panels, separated by scored lines, end flaps on all of said panels adapted to be connected in pairs independently, and a front flap connected to the cover and provided with two scored lines 6, 6ª, said flap folding on the line 6 when the box is erected and folding on the lines 6 and 6ª to inclose the free edges of the blank when the box is knocked down, substantially as described.

3. The blank for a knockdown paper box comprising the front panel provided with a flat pivoted hook, the bottom panel, the end flaps on said front and bottom panels each provided with a flat pivoted hook, the back and top panels, the end flaps on said top and back panels each provided with a flat keeper adapted to coöperate with one of the hooks on the aforesaid flaps, the front flap *e* provided with two scored lines, and the double keeper on said front flap adapted to coöperate with the hook on the front panel, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

RICHARD RABY.

Witnesses:
S. A. TERRY,
CHARLES SNYDER.